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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/762,485

01/23/2004

Win-Chee Yu

TAIW 211

4929

7590

03/01/2006

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EXAMINER

FANTU, YALKEW

ART UNIT

PAPER NUMBER

2838

DATE MAILED: 03/01/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

pn

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/762,485	YU ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Yalkew Fantu	2838	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 23 January 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2, 3, 6, 7, 8, 9, 11 and 12 are rejected under 35 U.S.C. 102(b) as being anticipated by Hulman (US 5,367,242).

Regarding claim 1, Hulman discloses an integral induction battery charge apparatus (Fig. 1) having a charge end to generate induction magnetic field (Col. 4 lines 12 and 13) to charge an induction charge battery (Fig. 1 element 13), comprising: a power supply (Fig. 1 element 7), a detecting module (Fig. 1 element 8) to detect the charge battery and to generate a start signal (Fig. 1 element 6 and 8; Col. 3 lines 40-43), activation and detection module for receiving the start signal (Fig. 1 elements 6,8 see also Fig. 2) and an induction module (Fig. 1 elements 4, 5 and magnetic field (Col. 4 lines 12 and 13)) and electromagnetic induction (it is inherent of such a system).

Regarding claim 2, Hulman discloses the integrated induction battery charge apparatus of claim 1, wherein the induction module includes an induction coil (Fig. 4 and 5).

With respect to claim 3, Hulman discloses induction battery charge of claim 1, wherein the detection module (Fig. 1 element 8) detects through electromagnetic induction (Col. 4 lines 12-16).

With respect to claim 6, an integrated induction charge battery (Fig. 1), comprising: a charge battery (Fig. 1 element 13), an induction module integrated with the charge battery (Fig. 1 and Fig. 2) for transforming magnetic energy transferred from a charge end through electromagnetic induction to charge the battery (Fig. 1 and 2), a rectification module (Fig. 10) connected to the induction module for transforming an AC voltage generated (Fig. 2 elements 7, 6'4, 5, 25, and 16).

With respect to claim 7, the battery of claim 6 further includes a filter (Col. 4 lines 15 and 16) connected to a rectification module (Fig. 1 element 10).

Regarding claim 8 the battery of claim 7, wherein the filter (Col. 4 lines 15 and 16) includes at least one inductor and one capacitor in parallel (Fig. 3 element 31). Applicant claims the filter module that includes at least one inductor and one capacitor in parallel. Reference shows a filter having one capacitor in parallel with one resistor, and as known to those skilled in the art one would understand the use of resistor in place of inductor for the simple use of a filter as described in this reference.

Regarding claim 9, an induction coil (Fig. 1 elements 4 and 5).

With respect to claim 11, the battery of claim 6, wherein the rectification module is a bridge rectifier (Fig. 3 element 30).

With respect to claim 12, a battery of a portable information process apparatus (Fig. 1 element 2).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 4,5,10 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hulman (US 5,367,242) as applied to claims 1 and 6 above, and further in view of Kuennen et al (US 6,825,620).

With respect to claims 4,5 and 13 Hulman discloses the integrated battery charger apparatus as set forth above in the 35 USC 102 rejection above, however, does not disclose expressly piezoelectric induction, metal semiconductor switch, and a mobile communication apparatus. The Kuennen et al reference, however teaches all three of them.

With respect to claim 4, the integrated battery charger apparatus of claim 1, wherein the detection module detects through piezoelectric (Col. 22 lines 58 and 59) induction.

With respect to claim 5, integrated battery charge apparatus of claim 1, wherein the activation module includes metal oxide semiconductor switches (Col. 2 line 57 and 58).

Regarding claim 13 the battery of claim 6, wherein the battery of a mobile communication apparatus (Col. 4 lines 64-68).

Hulman and Kuennen et al are analogous art because they are from the same field of endeavor namely inductive battery charging apparatus.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art, to have added piezoelectric induction, metal semiconductor switch, and a mobile communication apparatus to the induction battery apparatus of Hulman in view of the teachings of Kuennen et al.

The suggestion and motivation for doing would have been that the use of piezoelectric induction, a metal semiconductor switch, and a mobile communication apparatus to control the voltage activities of the charging apparatus.

Therefore it would have been obvious to combine Kuennen et al with Hulman for the benefit of forming an integral charging apparatus using semiconductor MOS switches to obtain the invention as specified in the claims 4, 5 and 13.

Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hulman (US 5,367,242) in view of Burton et al (US 6,917,182).

Regarding claim 10, Hulman discloses the claim invention except an induction coil, which has a desired number of coil rings. However, Burton et al teaches induction coil, which has a desired number of coil rings (Fig. 2 elements 291,292,293 and 294) according to voltage specification of the battery (Col. 4 lines 5-29). It would have been obvious to a person having ordinary skill in the art at that time of the invention to modify Hulman's induction coil to have more coil rings in order to charge battery according to voltage specifications of the battery.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yalkew Fantu whose telephone number is 571-272-8928. The examiner can normally be reached on (M-F);(8AM-5PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David M. Gray can be reached on 571-272-2119. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'David Gray', with a long horizontal line extending to the right.

David Gray  
Primary Examiner